

SCHWEGMAN ■ LUNDBERG ■ WOESSNER ■ KLUTH

United States Patent Application
COMBINED DECLARATION AND POWER OF ATTORNEY

As a below named inventor I hereby declare that: my residence, post office address and citizenship are as stated below next to my name; that

I verily believe I am the original, first and joint inventor of the subject matter which is claimed and for which a patent is sought on the invention entitled: **HIGH-THROUGHPUT MULTICARRIER COMMUNICATION SYSTEMS AND METHODS FOR EXCHANGING CHANNEL STATE INFORMATION.**

The specification of which is attached hereto.

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the patentability of this application in accordance with 37 C.F.R. § 1.56 (attached hereto). I also acknowledge my duty to disclose all information known to be material to patentability which became available between a filing date of a prior application and the national or PCT international filing date in the event this is a Continuation-In-Part application in accordance with 37 C.F.R. § 1.63(e).

I hereby claim foreign priority benefits under 35 U.S.C. §119(a)-(d) or 365(b) of any foreign application(s) for patent or inventor's certificate, or 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on the basis of which priority is claimed:

No such claim for priority is being made at this time.

I hereby claim the benefit under 35 U.S.C. § 119(e) of any United States provisional application(s) listed below:

<u>Application Number</u>	<u>Filing Date</u>
60/536071	January 12, 2004

I hereby claim the benefit under 35 U.S.C. § 120 or 365(c) of any United States and PCT international application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT international application in the manner provided by the first paragraph of 35 U.S.C. § 112, I acknowledge the duty to disclose material information as defined in 37 C.F.R. § 1.56(a) which became available between the filing date of the prior application and the national or PCT international filing date of this application:

No such claim for priority is being made at this time.

I hereby appoint the following attorney(s) and/or patent agent(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected herewith:

Aldous, Alan	Reg. No. 31,905	Greenberg, Robert A.	Reg. No. 44,133	Perdok, Monique M.	Reg. No. 42,989
Anderson, Robert D.	Reg. No. 33,826	Greenwald, Bradley A.	Reg. No. 34,341	Peret, Andrew R.	Reg. No. 41,246
Anglin, J. Michael	Reg. No. 24,916	Harris, Robert J.	Reg. No. 37,346	Peterson, David C.	Reg. No. 47,857
Arora, Sunee	Reg. No. 42,267	Hope, Libby	Reg. No. 46,774	Plimier, Michael D.	Reg. No. 43,004
Bacon, Shireen	Reg. No. 40,494	Huter, Jeffrey B.	Reg. No. 41,086	Price, Lucinda G.	Reg. No. 42,270
Barre, Michael	Reg. No. 44,023	Jackson Huebsch, Katharine A.	Reg. No. 47,670	Prokoch, Michael A.	Reg. No. 43,021
Beale, Jay P.	Reg. No. 50,901	Jordan, B. D.	Reg. No. 43,698	Prout, William F.	Reg. No. 33,995
Beckman, Marvin L.	Reg. No. 38,377	Jurkovich, Patti J.	Reg. No. 44,813	Reif, Kevin A.	Reg. No. 36,381
Bianchi, Timothy E.	Reg. No. 39,610	Kalis, Janal M.	Reg. No. 37,650	Sayles, Crystal D.	Reg. No. 44,318
Billion, Richard E.	Reg. No. 32,836	Kaison, Seth	Reg. No. 40,670	Schumm, Sherry W.	Reg. No. 39,422
Black, David W.	Reg. No. 42,331	Klima-Silberg, Catherine I.	Reg. No. 40,032	Schwegman, Michael L.	Reg. No. 25,816
Bohanek, Bob	Reg. No. 52,627	Kluth, Daniel J.	Reg. No. 32,146	Scott, Russell	Reg. No. 43,103
Brake, Edward	Reg. No. 37,784	Lacy, Rodney L.	Reg. No. 41,136	Seddon, Ken	Reg. No. 43,105
Brennan, Thomas F.	Reg. No. 35,075	Lam, Peter	Reg. No. 44,855	Seelye, Mark	Reg. No. 32,299
Burge, Ben	Reg. No. 42,372	Lin, Isaac	Reg. No. 50,672	Shah, Ami F.	Reg. No. 42,143
Chadwick, Robin A.	Reg. No. 36,477	Lundberg, Steven W.	Reg. No. 30,568	Simon, David	Reg. No. 32,756
Chen, George	Reg. No. 50,807	Maki, Peter C.	Reg. No. 42,832	Skubrat, Steve	Reg. No. 36,279
Choi, Gion	Reg. No. 43,546	Malen, Peter L.	Reg. No. 44,894	Speier, Gary J.	Reg. No. 45,458
Clark, Barbara J.	Reg. No. 38,107	Martinez, Anthony	Reg. No. 44,223	Steffey, Charles E.	Reg. No. 25,179
Clise, Timothy B.	Reg. No. 40,957	Mates, Robert E.	Reg. No. 35,271	Steiner, Paul E.	Reg. No. 41,326
Cochman, David R.	Reg. No. 46,632	McCall, Molly	Reg. No. 46,126	Stutman-Horn, Joni D.	Reg. No. 42,173
Cool, Kenneth J.	Reg. No. 40,570	McCrackin, Ann M.	Reg. No. 42,858	Tong, Viet V.	Reg. No. 45,416
Crawford, Ted A.	Reg. No. 50,610	Mehrl, Joseph P.	Reg. No. 45,535	Tran, David	Reg. No. 50,804
Dahl, John M.	Reg. No. 44,639	Mennermeier, Larry	Reg. No. 51,003	Travis, John F.	Reg. No. 43,203
DeLizio, Andrew	Reg. No. 52,806	Muller, Mark V.	Reg. No. 37,509	Tweet, Kerry D.	Reg. No. 45,959
Diehl, Robert	Reg. No. 40,992	Nagy, Paul	Reg. No. 37,896	Wawrzyn, Robert	Reg. No. 54,654
Drager, Jeffrey S.	Reg. No. 41,000	Nelson, A. James	Reg. No. 28,650	Wells, Calvin	Reg. No. 43,256
Drake, Eduardo E.	Reg. No. 40,594	Neshevawat, Michael J.	Reg. No. 47,819	Whittington, Stuart	Reg. No. 45,215
Embretson, Janet E.	Reg. No. 39,665	Newison, Ruth H.	Reg. No. 26,657	Willardson, Michael	Reg. No. 50,856
Faatz, Cindy	Reg. No. 39,973	Nicholls, Dennis A.	Reg. No. 42,036	Winkle, Robert G.	Reg. No. 37,474
Forrest, Bradley A.	Reg. No. 30,837	Nielsen, Walter W.	Reg. No. 25,539	Wisor, Rita	Reg. No. 41,382
Gagno, Christopher	Reg. No. 36,142	Padya, Danny J.	Reg. No. 35,635	Woessner, Warren D.	Reg. No. 30,440
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Green, Sharmini N.	Reg. No. 41,410	Pedersen-Gilos, Alan	Reg. No. 39,996		

I hereby authorize them to act and rely on instructions from and communicate directly with the person/assignee/attorney/firm/organization/who/which first sends/sent this case to them and by whom/which I hereby declare that I have consented after full disclosure to be represented unless/until I instruct Schwegman, Lundberg, Woessner & Kluth, P.A. to the contrary. Please direct all correspondence in this case to Schwegman, Lundberg, Woessner & Kluth, P.A. at the address indicated below:

P.O. Box 2938, Minneapolis, MN 55402
Telephone No. (612)373-6900

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full Name of joint inventor number 1 : Alexander A. Maltsev

Citizenship: Russian Federation
Post Office Address: Verhne-Pecherskaya Str., 1-7
Nizhny Novgorod 603163
Russian Federation

Residence: Nizhny Novgorod Russian Federation

Signature: Alexander A. Maltsev

Date: March 26, 2004

X Additional inventors are being named on separately numbered sheets, attached hereto.

Attorney Docket No.: 884.B95US1
Serial No. not assigned
Filing Date: not assigned

Page 3 of 4

Full Name of joint inventor number 2 : Ali S. Sadri
Citizenship: United States of America Residence: San Diego, CA
Post Office Address: 11835 Carmel Mountain Road
Suite 1304-306
San Diego, CA 92128

Signature: Ali S. Sadri Date: _____

Full Name of joint inventor number 3 : Vadim S. Sergeyev
Citizenship: Russian Federation Residence: Nizhny Novgorod Russian Federation
Post Office Address: Vaneeva Str., 19-28
Nizhny Novgorod 603105
Russian Federation

Signature: Vadim S. Sergeyev Date: March, 26, 2004

Full Name of joint inventor number 4 : Adrian F. Stephens
Citizenship: United Kingdom Residence: Cottenham, Cambridge United Kingdom
Post Office Address: 64 Lamb's Lane
Cottenham, Cambridge CB4 8TA
United Kingdom

Signature: Adrian F. Stephens Date: _____

Full Name of joint inventor number 5 : John S. Sadowsky
Citizenship: United States of America Residence: Mesa, AZ
Post Office Address: 1428 West Lindner
Mesa, AZ 85202

Signature: John S. Sadowsky Date: _____

§ 1.56 Duty to disclose information material to patentability.

(a) A patent by its very nature is affected with a public interest. The public interest is best served, and the most effective patent examination occurs when, at the time an application is being examined, the Office is aware of and evaluates the teachings of all information material to patentability. Each individual associated with the filing and prosecution of a patent application has a duty of candor and good faith in dealing with the Office, which includes a duty to disclose to the Office all information known to that individual to be material to patentability as defined in this section. The duty to disclose information exists with respect to each pending claim until the claim is canceled or withdrawn from consideration, or the application becomes abandoned. Information material to the patentability of a claim that is canceled or withdrawn from consideration need not be submitted if the information is not material to the patentability of any claim remaining under consideration in the application. There is no duty to submit information which is not material to the patentability of any existing claim. The duty to disclose all information known to be material to patentability is deemed to be satisfied if all information known to be material to patentability of any claim issued in a patent was cited by the Office or submitted to the Office in the manner prescribed by §§ 1.97(b)-(d) and 1.98. However, no patent will be granted on an application in connection with which fraud on the Office was practiced or attempted or the duty of disclosure was violated through bad faith or intentional misconduct. The Office encourages applicants to carefully examine:

- (1) prior art cited in search reports of a foreign patent office in a counterpart application, and
- (2) the closest information over which individuals associated with the filing or prosecution of a patent application believe any pending claim patentably defines, to make sure that any material information contained therein is disclosed to the Office.

(b) Under this section, information is material to patentability when it is not cumulative to information already of record or being made of record in the application, and

- (1) It establishes, by itself or in combination with other information, a prima facie case of unpatentability of a claim; or
- (2) It refutes, or is inconsistent with, a position the applicant takes in:
 - (i) Opposing an argument of unpatentability relied on by the Office, or
 - (ii) Asserting an argument of patentability.

A prima facie case of unpatentability is established when the information compels a conclusion that a claim is unpatentable under the preponderance of evidence, burden-of-proof standard, giving each term in the claim its broadest reasonable construction consistent with the specification, and before any consideration is given to evidence which may be submitted in an attempt to establish a contrary conclusion of patentability.

- (c) Individuals associated with the filing or prosecution of a patent application within the meaning of this section are:
 - (1) Each inventor named in the application;
 - (2) Each attorney or agent who prepares or prosecutes the application; and
 - (3) Every other person who is substantively involved in the preparation or prosecution of the application and who is associated with the inventor, with the assignee or with anyone to whom there is an obligation to assign the application.
- (d) Individuals other than the attorney, agent or inventor may comply with this section by disclosing information to the attorney, agent, or inventor.

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United States Patent Application

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Application Number
60/536071

Filing Date
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Full Name of joint inventor number 1 : Alexander A. Maltsev

Citizenship: Russian Federation

Post Office Address: Verhne-Pecherskaya Str., 1-7
Nizhny Novgorod 603163
Russian Federation

Residence: Nizhny Novgorod Russian Federation

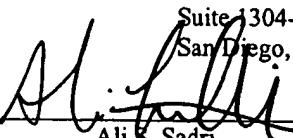
Signature: _____

Alexander A. Maltsev

Date: _____

X Additional inventors are being named on separately numbered sheets, attached hereto.

Full Name of joint inventor number 2 : Ali S. Sadri
Citizenship: **United States of America**
Post Office Address: **11835 Carmel Mountain Road
Suite 1304-306
San Diego, CA 92128**

Signature: 
Ali S. Sadri

Residence: **San Diego, CA**

Date: March 23-04

Full Name of joint inventor number 3 : Vadim S. Sergeev
Citizenship: **Russian Federation**
Post Office Address: **Vaneeva Str., 19-28
Nizhny Novgorod 603105
Russian Federation**

Signature: Vadim S. Sergeev

Residence: **Nizhny Novgorod Russian Federation**

Date: _____

Full Name of joint inventor number 4 : Adrian P. Stephens
Citizenship: **United Kingdom**
Post Office Address: **64 Lamb's Lane
Cottenham, Cambridge CB4 8TA
United Kingdom**

Signature: Adrian P. Stephens

Residence: **Cottenham, Cambridge United Kingdom**

Date: _____

Full Name of joint inventor number 5 : John S. Sadowsky
Citizenship: **United States of America**
Post Office Address: **1428 West Lindner
Mesa, AZ 85202**

Signature: John S. Sadowsky

Residence: **Mesa, AZ**

Date: _____

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(c) Individuals associated with the filing or prosecution of a patent application within the meaning of this section are:

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- (3) Every other person who is substantively involved in the preparation or prosecution of the application and who is associated with the inventor, with the assignee or with anyone to whom there is an obligation to assign the application.

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Attorney Docket No.884.B95US1

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United States Patent Application

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Aldous, Alan	Reg. No. 31,905	Greenberg, Robert A.	Reg. No. 44,133	Perdok, Monique M.	Reg. No. 42,989
Anderson, Robert D.	Reg. No. 33,826	Greenwald, Bradley A.	Reg. No. 34,341	Peret, Andrew R.	Reg. No. 41,246
Anglin, J. Michael	Reg. No. 24,916	Harris, Robert J.	Reg. No. 37,346	Peterson, David C.	Reg. No. 47,857
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Bohanek, Bob	Reg. No. 52,627	Kluth, Daniel J.	Reg. No. 32,146	Scott, Russell	Reg. No. 43,103
Brake, Edward	Reg. No. 37,784	Lacy, Rodney L.	Reg. No. 41,136	Seddon, Ken	Reg. No. 43,105
Brennan, Thomas F.	Reg. No. 35,075	Lam, Peter	Reg. No. 44,855	Seecley, Mark	Reg. No. 32,299
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Embretson, Janet E.	Reg. No. 39,665	Newton, Ruth H.	Reg. No. 26,657	Willardson, Michael	Reg. No. 50,856
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Forrest, Bradley A.	Reg. No. 30,837	Nielsen, Walter W.	Reg. No. 25,539	Wisor, Rita	Reg. No. 41,382
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Green, Sharmini N.	Reg. No. 41,410	Pedersen-Giles, Alan	Reg. No. 39,996		

I hereby authorize them to act and rely on instructions from and communicate directly with the person/assignee/attorney/firm/organization/who/which first sends/sent this case to them and by whom/which I hereby declare that I have consented after full disclosure to be represented unless/until I instruct Schwegman, Lundberg, Woessner & Kluth, P.A. to the contrary.

Please direct all correspondence in this case to Schwegman, Lundberg, Woessner & Kluth, P.A. at the address indicated below:

P.O. Box 2938, Minneapolis, MN 55402
 Telephone No. (612)373-6900

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full Name of joint inventor number 1 : Alexander A. Maltsev

Citizenship: Russian Federation

Post Office Address: Verhne-Pecherskaya Str., 1-7
 Nizhny Novgorod 603163
 Russian Federation

Residence: Nizhny Novgorod Russian Federation

Signature: _____

Alexander A. Maltsev

Date: _____

X Additional inventors are being named on separately numbered sheets, attached hereto.

Attorney Docket No.: 884.B95US1
Serial No. not assigned
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Page 3 of 4

Full Name of joint inventor number 2 : Ali S. Sadri
Citizenship: United States of America Residence: San Diego, CA
Post Office Address: 11835 Carmel Mountain Road
Suite 1304-306
San Diego, CA 92128

Signature: Ali S. Sadri Date: _____

Full Name of joint inventor number 3 : Vadim S. Sergeyev
Citizenship: Russian Federation Residence: Nizhny Novgorod Russian Federation
Post Office Address: Vaneeva Str., 19-28
Nizhny Novgorod 603105
Russian Federation

Signature: Vadim S. Sergeyev Date: _____

Full Name of joint inventor number 4 : Adrian P. Stephens
Citizenship: United Kingdom Residence: Cottenham, Cambridge United Kingdom
Post Office Address: 64 Lamb's Lane
Cottenham, Cambridge CB4 8TA
United Kingdom

Signature: Adrian P. Stephens Date: 23 March 04

Full Name of joint inventor number 5 : John S. Sadowsky
Citizenship: United States of America Residence: Mesa, AZ
Post Office Address: 1428 West Lindner
Mesa, AZ 85202

Signature: John S. Sadowsky Date: _____

Attorney Docket No.: 884.B95US1
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§ 1.56 Duty to disclose information material to patentability.

(a) A patent by its very nature is affected with a public interest. The public interest is best served, and the most effective patent examination occurs when, at the time an application is being examined, the Office is aware of and evaluates the teachings of all information material to patentability. Each individual associated with the filing and prosecution of a patent application has a duty of candor and good faith in dealing with the Office, which includes a duty to disclose to the Office all information known to that individual to be material to patentability as defined in this section. The duty to disclose information exists with respect to each pending claim until the claim is canceled or withdrawn from consideration, or the application becomes abandoned. Information material to the patentability of a claim that is canceled or withdrawn from consideration need not be submitted if the information is not material to the patentability of any claim remaining under consideration in the application. There is no duty to submit information which is not material to the patentability of any existing claim. The duty to disclose all information known to be material to patentability is deemed to be satisfied if all information known to be material to patentability of any claim issued in a patent was cited by the Office or submitted to the Office in the manner prescribed by §§ 1.97(b)-(d) and 1.98. However, no patent will be granted on an application in connection with which fraud on the Office was practiced or attempted or the duty of disclosure was violated through bad faith or intentional misconduct. The Office encourages applicants to carefully examine:

- (1) prior art cited in search reports of a foreign patent office in a counterpart application, and
- (2) the closest information over which individuals associated with the filing or prosecution of a patent application believe any pending claim patentably defines, to make sure that any material information contained therein is disclosed to the Office.

(b) Under this section, information is material to patentability when it is not cumulative to information already of record or being made of record in the application, and

- (1) It establishes, by itself or in combination with other information, a prima facie case of unpatentability of a claim; or
- (2) It refutes, or is inconsistent with, a position the applicant takes in:
 - (i) Opposing an argument of unpatentability relied on by the Office, or
 - (ii) Asserting an argument of patentability.

A prima facie case of unpatentability is established when the information compels a conclusion that a claim is unpatentable under the preponderance of evidence, burden-of-proof standard, giving each term in the claim its broadest reasonable construction consistent with the specification, and before any consideration is given to evidence which may be submitted in an attempt to establish a contrary conclusion of patentability.

(c) Individuals associated with the filing or prosecution of a patent application within the meaning of this section are:

- (1) Each inventor named in the application;
- (2) Each attorney or agent who prepares or prosecutes the application; and
- (3) Every other person who is substantively involved in the preparation or prosecution of the application and who is associated with the inventor, with the assignee or with anyone to whom there is an obligation to assign the application.

(d) Individuals other than the attorney, agent or inventor may comply with this section by disclosing information to the attorney, agent, or inventor.

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Attorney Docket No.884.B95US1

SCHWEGMAN ■ LUNDBERG ■ WOESSNER ■ KLUTH

United States Patent Application
COMBINED DECLARATION AND POWER OF ATTORNEY

As a below named inventor I hereby declare that: my residence, post office address and citizenship are as stated below next to my name; that

I verily believe I am the original, first and joint inventor of the subject matter which is claimed and for which a patent is sought on the invention entitled: **HIGH-THROUGHPUT MULTICARRIER COMMUNICATION SYSTEMS AND METHODS FOR EXCHANGING CHANNEL STATE INFORMATION**.

The specification of which is attached hereto.

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the patentability of this application in accordance with 37 C.F.R. § 1.56 (attached hereto). I also acknowledge my duty to disclose all information known to be material to patentability which became available between a filing date of a prior application and the national or PCT international filing date in the event this is a Continuation-In-Part application in accordance with 37 C.F.R. § 1.63(e).

I hereby claim foreign priority benefits under 35 U.S.C. § 119(a)-(d) or 365(b) of any foreign application(s) for patent or inventor's certificate, or 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on the basis of which priority is claimed:

No such claim for priority is being made at this time.

I hereby claim the benefit under 35 U.S.C. § 119(e) of any United States provisional application(s) listed below:

Application Number

60/536071

Filing Date

January 12, 2004

I hereby claim the benefit under 35 U.S.C. § 120 or 365(c) of any United States and PCT international application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT international application in the manner provided by the first paragraph of 35 U.S.C. § 112, I acknowledge the duty to disclose material information as defined in 37 C.F.R. § 1.56(a) which became available between the filing date of the prior application and the national or PCT international filing date of this application:

No such claim for priority is being made at this time.

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Attorney Docket No.: 884.B95US1
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Full Name of joint inventor number 1 : Alexander A. Maltsev

Citizenship: Russian Federation
 Post Office Address: Verhne-Pecherskaya Str., 1-7
Nizhny Novgorod 603163
Russian Federation

Residence: Nizhny Novgorod Russian Federation

Signature: _____

Alexander A. Maltsev

Date: _____

Additional inventors are being named on separately numbered sheets, attached hereto.

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Attorney Docket No.: 884.B95US1
Serial No. not assigned
Filing Date: not assigned

Page 3 of 4

Full Name of joint inventor number 2 : Ali S. Sadri
Citizenship: United States of America Residence: San Diego, CA
Post Office Address: 11835 Carmel Mountain Road
Suite 1304-306
San Diego, CA 92128

Signature: _____ Date: _____
Ali S. Sadri

Full Name of joint inventor number 3 : Vadim S. Sergeyev
Citizenship: Russian Federation Residence: Nizhny Novgorod Russian Federation
Post Office Address: Vaneeva Str., 19-28
Nizhny Novgorod 603105
Russian Federation

Signature: _____ Date: _____
Vadim S. Sergeyev

Full Name of joint inventor number 4 : Adrian P. Stephens
Citizenship: United Kingdom Residence: Cottenham, Cambridge United Kingdom
Post Office Address: 64 Lamb's Lane
Cottenham, Cambridge CB4 8TA
United Kingdom

Signature: _____ Date: _____
Adrian P. Stephens

Full Name of joint inventor number 5 : John S. Sadowsky
Citizenship: United States of America Residence: Mesa, AZ
Post Office Address: 1428 West Lindner
Mesa, AZ 85202

Signature: John S. Sadowsky Date: March 24, 2004
John S. Sadowsky

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